

GENERAL NOTES:

- 1. ALL CONSTRUCTION AND MATERIALS INCLUDED ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ENGINEERING DESIGN AND CONSTRUCTION MANUAL OF THE COUNTY OF SUMMIT ENGINEER'S, WHERE CONFLICTS OCCUR IN THE ABOVE, THE COUNTY OF SUMMIT ENGINEER SHALL DETERMINE THE GOVERNING AUTHORITY.
2. ANY DEFECTS IN THE CONSTRUCTION INCLUDING MATERIALS OR WORKMANSHIP SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER APPROVED METHOD PRIOR TO ACCEPTANCE BY THE COUNTY OF SUMMIT ENGINEER.
3. THE COUNTY OF SUMMIT ENGINEER SHALL NOT BE HELD LIABLE FOR DAMAGES OF ANY TYPE WHICH MAY OCCUR AS A RESULT OF ERROR AND/OR OMISSIONS IN THE ENGINEERING DESIGN DATA PRESENTED BY THE DEVELOPER'S ENGINEER, NOR SHALL THE COUNTY OF SUMMIT ENGINEER BE LIABLE FOR DAMAGES RESULTING FROM THE DEVELOPER'S CONTRACTOR NOT COMPLYING WITH THE APPROVED PLANS OR BY USING CONSTRUCTION METHODS OR MATERIALS NOT APPROVED BY THE COUNTY OF SUMMIT ENGINEER.
4. THE DEVELOPER'S ENGINEER CERTIFIES THAT ALL DESIGN DATA AND CALCULATIONS PERTAINING TO THESE IMPROVEMENT PLANS, WHERE APPLICABLE, ARE CORRECT AND DO CONFORM TO THE CURRENT DESIGN CRITERIA.
5. THE COUNTY OF SUMMIT ENGINEER IN APPROVING THESE PLANS AND DEDICATION PLAT THEREOF DOES NOT, IN ANY WAY RELIEVE THE DEVELOPER'S ENGINEER OF HIS RESPONSIBILITY FOR ACCURATE AND COMPLETE ENGINEERING DESIGN RELATIVE TO THE PLANS.
6. ALL ROAD SURFACES, EASEMENTS OR RIGHT OF WAYS DISTURBED BY CONSTRUCTION OF ANY PART OF THIS IMPROVEMENT ARE TO BE RESTORED COMPLETELY TO THE BEFORE CONSTRUCTION CONDITION OR BETTER WHEN ORDERED BY THE COUNTY OF SUMMIT ENGINEER AND/OR THE SUMMIT COUNTY D.O.E.S.
7. THE LOCATIONS OF ALL BURIED UTILITY AND GAS LINES ARE TO BE DETERMINED BY THE CONTRACTOR. EXISTING APPURTENANCES SUCH AS UTILITY POLES, VALVE BOXES, ETC. ARE TO BE SAFEGUARDED BY THE CONTRACTOR DURING CONSTRUCTION.
8. THE CONTRACTOR SHALL NOT COMMENCE WITH ANY FORM OF CONSTRUCTION WITHOUT NOTIFYING THE COUNTY OF SUMMIT ENGINEER FORTY-EIGHT (48) HOURS PRIOR TO STARTING CONSTRUCTION (330/643-2850).
9. THE CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION SERVICE, 1-800-362-2764 AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY UNDERGROUND WORK IS COMMENCED IN EXISTING STREETS.
10. ALL LAWN AREAS REMOVED OR DISTURBED SHALL BE REPLACED BY SEEDING AND MULCHING, INCLUDING TOPSOIL WHERE NEEDED, IN ACCORDANCE WITH ITEM 659 OF D.O.D.T. SPECIFICATION AND SHALL BE RESEEDED AND MULCHED, WHEN REQUESTED IF SATISFACTORY RE- ESTABLISHMENT OF LAWN DOES NOT OCCUR.
11. ALL DISTURBED SIGNS, GUARDRAIL, MAIL AND/OR PAPER BOXES, DRIVES AND DRIVE CULVERTS SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED BY THE COUNTY OF SUMMIT ENGINEER.
12. ALL DISTURBED AND/OR DAMAGED STORM SEWER PIPES, STORM SEWER APPURTENANCES, PAVEMENTS, BERMS AND DITCHES SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED BY THE COUNTY OF SUMMIT ENGINEER.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH D.O.D.T. ITEM 207, SUMMIT SOIL AND WATER CONSERVATION DISTRICT AND THE COUNTY OF SUMMIT ENGINEER. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE ANY OTHER CONSTRUCTION COMMENCES ON THIS SITE. THE CONTRACTOR SHALL, ON A DAILY BASIS, CLEAN ALL EXISTING STREETS OF MUD AND DIRT DURING THE CONSTRUCTION PHASE.
14. ALL STORM SEWER CONSTRUCTION WITHIN RIGHT-OF-WAY LIMITS SHALL CONFORM TO D.O.D.T. ITEM 603, CONDUIT MAY BE CONCRETE, CORRUGATED METAL PIPE AND/OR PLASTIC PIPE AS LISTED WITHIN THE APPROVED IMPROVEMENT PLANS. REINFORCED CONCRETE PIPE, RCP, WITH BITUMINOUS JOINTS SHALL MEET THE PIPE REQUIREMENTS OF ASTM C-76, CLASS III MINIMUM PER SECTION 706.02 AS SPECIFIED IN THE D.O.D.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS UNLESS OTHERWISE NOTED ON PLANS. CORRUGATED METAL PIPE SHALL MEET D.O.D.T. ITEM 707.21 OR 707.22 ALUMINIZED TYPE 2 COATED, PLASTIC PIPE, HDPE, SHALL BE SMOOTH LINED CORRUGATED POLYETHYLENE PIPE PER D.O.D.T. ITEM 707.33.
15. STORM MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAIL PROVIDED ON SHEET 20. IN ADDITION, STORM MANHOLES SHALL BE PRECAST SECTIONS WHICH CONFORM TO ASTM C- 478 WITH A BITUMASTIC TYPE JOINT OR "O" RINGS, WITH THE CYLINDRICAL SECTION OF THE MANHOLE TO BE EXTENDED VERTICALLY FROM INVERT SHELF. MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48" FOR PIPES LESS THAN OR EQUAL TO 30", 60" FOR PIPE SIZES MORE THAN 30" BUT LESS THAN OR EQUAL TO 36" AND FOR PIPES OF LARGER SIZE INCREASE THE MANHOLE OF DIAMETER ACCORDINGLY TO MAINTAIN A MINIMUM OF 6" BETWEEN ADJACENT HOLES MEASURED ALONG THE INSIDE PERIMETER. ADJUSTMENT TO THE MANHOLE CASTING TO GRADE SHALL BE BY THE USE OF PRECAST CONCRETE ADJUSTING RINGS OR NEW SOLID CLAY OR SHALE BRICK ASTM C-32 (TWO (2) COURSES MAXIMUM AND/OR TWELVE (12) INCH MAXIMUM ADJUSTMENT).
16. CATCH BASINS AND/OR INLET BASINS SHALL BE INSTALLED IN ACCORDANCE WITH D.O.D.T. ITEM 604. CATCH BASINS SHALL HAVE A 30" MINIMUM SUMP. STRUCTURES SHALL HAVE D.O.D.T. ITEM 603.08, TYPE A (ITEM 304 SUBBASE MATERIAL) BACKFILL ON ALL FOUR SIDES. TWO FORTY-FIVE-- (45) DEGREE FOUR (4) INCH BENDS OR A TEE OUT OF BACK SHALL BE INSTALLED ON THE CURB SIDE OF STRUCTURE FOR CONNECTION OF UNDERDRAINS. ADJUSTMENT OF THE CATCH BASIN CASTING TO GRADE SHALL BE BY THE USE OF CAST-IN-PLACE CONCRETE. PRECAST CONCRETE ADJUSTING COLLARS, OR NEW SOLID CLAY OR SHALE BRICK PER ASTM C-32. THE INLET BASINS SHALL HAVE A POURED CONCRETE PAVED INVERT FLOOR. CATCH BASINS SHALL BE PLACED IN THE SYSTEM PRIOR TO STORM SEWER. SEE DETAIL SHT. SD-20.
17. UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH D.O.D.T. ITEM 605; CONDUIT SHALL BE A MINIMUM OF FOUR (4) INCH DIAMETER PIPE AND CONFORMING TO D.O.D.T. SPECIFICATION 707.33, 707.41, 707.42 OR 707.45 WITH NO. 8 AGGREGATE ON FOUR (4) INCH BEDDING. SEE DETAIL (SHEET 19).
18. WHERE STORM SEWER AND WATER MAIN INTERSECTIONS HAVE LESS THAN EIGHTEEN (18) INCH VERTICAL SEPARATION ENCASE THE LOWER AND MONOLITHICALLY GRADE THE UPPER PIPE IN 2500 PSI CONCRETE FOR THE WIDTH OF THE TRENCH.
19. ALL INSPECTION AND TESTING SHALL BE DONE BY AN EXPERIENCED AND QUALIFIED FIRM ENGAGED IN THIS TYPE OF WORK. VIDEOTAPES AND WRITTEN REPORTS OF ALL INSPECTION AND TESTING SHALL BE SUBMITTED TO THE OWNER AND THE COUNTY OF SUMMIT ENGINEER FOR APPROVAL. ALL STORM SEWER SYSTEMS MUST BE FLUSHED AND HAVE A COLOR TELEVISION INSPECTION IN ACCORDANCE WITH THE COUNTY OF SUMMIT ENGINEER SPECIFICATIONS PRIOR TO RELEASE OF THE PERFORMANCE BOND. IF THE INSTALLATION FAILS TO MEET THE REQUIREMENT OF THESE TESTS AND INSPECTIONS, THE CONTRACTOR SHALL REPAIR OR REPLACE DEFECTS AND RETEST THE INSTALLATION.
20. THE INTENT IS TO VIDEOTAPE PIPES NOT EASILY ACCESSIBLE FOR VISUAL INSPECTION. FOR EXAMPLE:
A CULVERT UNDER A ROAD THAT CAN BE VISUALLY CHECKED IS EXEMPT FROM VIDEO TAPING. A SYSTEM OF PIPES WITH MANHOLES WILL BE REQUIRED TO BE VIDEO TAPED. PIPES SIXTY (60) INCHES IN DIAMETER AND LARGER ARE EXEMPT FROM VIDEO TAPING PROVIDED VISUAL INSPECTION IS POSSIBLE.
21. STORM SEWER LATERALS SHALL BE PVC (SDR 35). ALL PIPES SHALL HAVE PREFORMED WYES FOR HOUSE LATERAL CONNECTIONS OF SIX (6) INCH DIAMETER FOR STORM SEWERS. STORM SEWER CONNECTIONS MAY BE PERFORMED BY MECHANICALLY TAPPING THE SEWER MAIN, INSTALLING A RUBBER BOOT OR CAST IRON SADDLE AND CONCRETE ENCASEING THE CONNECTION. ALL WYES AND LATERALS FOR DOWNSPOUT DRAINS SHALL BE INSTALLED WHEN THE STORM SEWER IS INSTALLED.
22. THE LINE AND GRADE OF STORM SEWER MAINS SHALL BE CONTROLLED DURING THE SEWER CONSTRUCTION BY USE OF AN APPROVED LASER DEVICE. THE LINE AND GRADE OF THE LASER SHALL BE "CHECKED" FROM LINE AND GRADE STAKES AT A MAXIMUM OF ONE HUNDRED (100) FEET INTERVALS.
23. ALL STORM SEWER AND UTILITY CONSTRUCTION CONDUIT BEDDING, PIPE COVER AND BACKFILL SHALL BE AS NOTED IN THE COUNTY OF SUMMIT ENGINEER TYPICAL TRENCH DETAIL (SEE SHEET 19).
24. ALL BACKFILL OF EXCAVATIONS (FOR TRENCHES AND STRUCTURES) UNDER BERM, PAVEMENT AREAS, EXISTING WALK AND DRIVE AREAS, OR WITHIN A 45 INFLUENCE LINE FROM THE EDGE OF PAVEMENT, SHALL BE D.O.D.T. ITEM 304. RECYCLED CONCRETE, CRUSHED SLAG, GRANULATED SLAG, OR SLACKER AGGREGATES SHALL NOT BE USED. ADDITIONAL MATERIAL TESTING MAY BE REQUIRED ON D.O.D.T. 304-CRUSHED AGGREGATE TO VERIFY THAT IT MEETS THE D.O.D.T. SPECIFICATION 703.17. THE CONTRACTOR MAY REVIEW ADDITIONAL MATERIALS FOR USE UPON A WRITTEN SUBMITTAL FOR COMPACTION REQUIREMENTS SEE THE TRENCH DETAIL ON SHEET 19.

- 25. WHEREVER UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THAT ARE NOT INDICATED ON THE PLANS, THE WORK SHALL BE DISCONTINUED UNTIL THE COUNTY OF SUMMIT ENGINEER APPROVES THE METHOD AND MATERIAL TO BE INCORPORATED INTO THE WORK, AS ALL CONDUITS SHALL BE INSTALLED ON A FIRM BED FOR ITS FULL LENGTH IN ACCORDANCE WITH D.O.D.T. ITEM 603.03 UNLESS OTHERWISE SPECIFIED.
26. ALL FILLED AREAS, EXCLUDING TRENCHES, WITHIN RIGHT-OF-WAY AREAS SHALL BE COMPACTED IN ACCORDANCE WITH D.O.D.T. ITEM 203. IN ADDITION, FOR ANY FILL IN EXCESS OF TWO (2) FEET, AN APPROVED TESTING COMPANY IN ACCORDANCE WITH D.O.D.T. ITEM 203 SHALL PERFORM NUCLEAR COMPACTION TESTS. THE COUNTY OF SUMMIT ENGINEER SHALL APPROVE THESE TESTS BEFORE ANY PAVEMENT CONSTRUCTION COMMENCES. THE COMPACTION REQUIREMENTS ARE LISTED IN THE TRENCH DETAIL ON SHEET 20.
27. BEFORE ACCEPTANCE OF THE SUB-GRADE BY THE COUNTY OF SUMMIT ENGINEER, A FORTY-(40) TON PROOF ROLL SHALL BE REQUIRED ON ALL AREAS TO BE PAVED IN ACCORDANCE WITH D.O.D.T. ITEM 204, IN LIEU OF USING THE EQUIPMENT UNDER ITEM 204, A TANDEM DUMP TRUCK WITH A GROSS WEIGHT OF 60,000 POUNDS MAY BE SUBSTITUTED.
28. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BACKFILL AND GRADE EXCAVATED AREAS SO AS TO ELIMINATE PONDING ON THE SITE.
29. FOR D.O.D.T. ITEMS 301 AND 448 THE CONTRACTOR SHALL PROVIDE THE COUNTY OF SUMMIT ENGINEER WITH A JOB MIX FORMULA FOR REVIEW AND APPROVAL PRIOR TO THE PAVING OF ROADWAYS. ALL MATERIALS USED MUST BE OBTAINED FROM A SOURCE APPROVED BY THE OHIO DEPARTMENT OF TRANSPORTATION, FOR ITEM 448, THE COARSE AGGREGATE IN THE MIX SHALL BE CRUSHED LIMESTONE. CRUSHED AGGREGATE MAY BE SUBMITTED AS AN ALTERNATE, BUT MUST BE APPROVED BY THE COUNTY OF SUMMIT ENGINEER. THE CONTRACTOR MUST SUBMIT A REQUEST, IN WRITING, ADDITIONAL TESTING VERIFYING THAT THE CRUSHED AGGREGATE MEETS D.O.D.T. 448 SPECIFICATION MAY BE REQUIRED. SURFACE COURSE SHALL BE CONSTRUCTED NOT LONGER THAN ONE (1) YEAR AFTER ITEM 301.
30. CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH D.O.D.T. 609; CAST IN PLACE CONCRETE CURB AND GUTTER.
31. NO ASPHALTIC PAVEMENT COURSE AND/OR CONCRETE PAVEMENT OF CURBING SHALL BE LAID ON FROZEN PAVEMENT, BASE OR SUBBASE.
32. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE COUNTY OF SUMMIT ENGINEER PRIOR TO ANY EARTHMOVING OPERATIONS, CALL (330) 643-2850.
33. A ROAD-OPENING PERMIT WILL BE REQUIRED ON ALL SUBDIVISIONS BEFORE ACCESS IS GRANTED FOR CONSTRUCTION PURPOSES FROM THE PUBLIC ROADWAY. THERE WILL BE NO EXCEPTIONS GRANTED. WE WILL NOT INSPECT OR ACCEPT ANY WORK THAT IS DONE WITHOUT A ROAD-OPENING PERMIT BEING AVAILABLE ON THE CONSTRUCTION SITE.
34. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS.
35. THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES.
36. IF ANY CHANGE IN THE WORK SCHEDULE BECOMES NECESSARY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE INSPECTOR TO AVOID UNNECESSARY INSPECTION COSTS. IF NO NOTIFICATION IS MADE IN REGARDS TO CANCELLATION OF WORK, THE DEVELOPER WILL BE CHARGED FOR THE INSPECTION TIME OCCURRED.
37. PRICES BID PER FOOT FOR ALL PIPE IS COMPLETE ON PLACE REGARDLESS OF SOIL AND ROCK CONDITIONS.
38. THE STORM WATER POLLUTION PREVENTION SHALL BE IMPLEMENTED PRIOR TO STARTING ANY CONSTRUCTIONACTIVITY.
39. LOT GRADES SHALL BE WITHIN +/- ONE (1) FOOT OF THE GRADES LISTED ON SHEETS 5 AND 6 OF THE GRADING PLAN.

OHIO E.P.A. WATER MAIN NOTES

- 1. A MINIMUM OF 35 PSI SHALL BE MAINTAINED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
2. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
3. A 12 INCH MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE EDGE OF ALL WATER MAIN PIPE TO THE OUTSIDE EDGE OF ALL STORM SEWER PIPE.
4. A 4 FOOT MINIMUM HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE EDGE OF ALL WATER MAIN PIPE TO THE OUTSIDE EDGE OF ALL STORM SEWER PIPE.
5. A 10 FOOT MINIMUM HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE EDGE OF THE WATER MAIN PIPE TO THE OUTSIDE EDGE OF THE SANITARY SEWER PIPE OR FORCE MAIN PIPE.
6. AN 18" MINIMUM VERTICAL CLEARANCE SHALL BE MAINTAINED FROM THE OUTSIDE EDGE OF ALL WATER MAIN PIPE TO THE OUTSIDE EDGE OF ALL SANITARY SEWER OR FORCE MAIN PIPE.

SANITARY SEWER: (OHIO E.P.A. REQUIREMENTS)

- 1. ALL SANITARY SEWER SHALL PASS THE AIR ACCEPTANCE TEST. THE INFILTRATION LIMIT SHALL NOT EXCEED 100 GAL./INCH DIA./MILE/DAY AS REQUIRED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY.
2. PRIOR TO ACCEPTANCE, ALL SANITARY SEWER MANHOLES SHALL PASS THE AIR TEST AS SPECIFIED BY ASTM C-1244.
3. A DEFLECTION TEST SHALL BE REQUIRED FOR ALL FLEXIBLE PIPE OF 8-INCH DIAMETER AND LARGER. THE TEST SHALL BE CONDUCTED AT LEAST 30 DAYS AFTER COMPLETION OF BACKFILL AND SHALL BE IN ACCORDANCE WITH THE OHIO ENVIRONMENTAL PROTECTION AGENCY AND SUMMIT COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES SPECIFICATIONS. THE ALLOWABLE DEFLECTION RATE SHALL NOT EXCEED FIVE (5%) PERCENT. TESTING SHALL BE IN ACCORDANCE WITH ASTM D-3034.
4. FLEXIBLE GASKETS ON SEWER LINES CONNECTIONS MUST MEET ASTM C-923 STANDARDS.
5. ALL PLASTIC PIPE SHALL CONFORM TO ASTM F-1417 PER THE TEN STATE STANDARDS.

DOMINION EAST OHIO GAS COMPANY NOTES:

ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DEO'S EXISTING PIPELINE(S) AND ALL OTHER IMPROVEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF DEO'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P. (SAFE EXCAVATION & SHORING). EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY DEO FACILITY OR APPURTENANCE. NOTIFY DEO IMMEDIATELY IF ANY HARM HAS BEEN INFLICTED UPON DEO'S FACILITIES (PIPELINES, ETC.) OR APPURTENANCES THERETO (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION WIRES & DEVICES, TEST SITES, VALVE BOXES, ETC.).

SANITARY SEWERS:

- 1. ALL SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS OF DEPARTMENT OF ENVIRONMENTAL SERVICES, (D.O.E.S.).
2. ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED. ORD. 85-856 APPROVED 10/08/85.
3. APPROVAL BY THE D.O.E.S. OFFICE CONSTITUTES NEITHER EXPRESSED NOR IMPLIED WARRANTIES AS TO THE FITNESS, ACCURACY, OR SUFFICIENCY OF PLANS, DESIGNS OR SPECIFICATIONS.
4. THE DESIGN ENGINEER CERTIFIES THAT ALL UTILITIES IN EXISTING AND PROPOSED ROADS AND EASEMENTS ARE SHOWN.
5. ALL SANITARY SEWERS SHALL PASS THE AIR ACCEPTANCE TEST PRIOR TO ACCEPTANCE BY D.O.E.S.
6. ALL SANITARY SEWERS SHALL BE VIDEO TAPED BY THE CONTRACTOR AND FOUND TO BE FREE OF DEFECTS AND FOREIGN MATTER AND IN PROPER ALIGNMENT PRIOR TO FORMAL ACCEPTANCE BY D.O.E.S.
7. ALL MANHOLES SHALL BE SUPPLIED WITH SOLID LIDS EXCEPT IN EASEMENTS WHERE THE MANHOLE COVERS SHALL BE THE SOLID-LOCKING TYPE.
8. ALL SANITARY SEWER LATERALS SHALL BE EXTENDED TO NOT LESS THAN 15 FEET INTO PROPERTY.
9. ALL SANITARY SEWER LATERALS SHALL BE LAID AT NO LESS THAN 1% GRADE.
10. SANITARY SEWER MATERIALS SHALL CONFORM TO D.O.E.S. AND O.E.P.A. STANDARDS.
11. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE EXISTING SEWERAGE SYSTEM RESULTING FROM NON-COMFORMANCE WITH SUMMIT COUNTY STANDARDS OR GENERAL NEGLIGENCE.
12. A 12" MAXIMUM MANHOLE GRADE ADJUSTMENT IS PERMITTED, ADJUSTMENT IS TO BE MADE WITH PRECAST GRADE RINGS OR RED BRICK (TWO COURSES MAXIMUM). A MINIMUM OF ONE (1) GRADE RING IS REQUIRED AT EACH MANHOLE.
13. INTERNAL CHIMNEY SEALS SHALL BE INSTALLED IN ALL MANHOLES.
14. MANHOLE COVER INSET SHALL BE PROVIDED FOR ALL MANHOLES REGARDLESS OF THE TYPE OF COVER REQUIRED.
15. WHERE INLET AND OUTLET PIPES CONNECT TO MANHOLES, A FLEXIBLE WATERTIGHT JOINT, AS APPROVED BY D.O.E.S., IS REQUIRED.
16. SANITARY SEWER MATERIAL SHALL CONSIST OF PVC SDR-35 MEETING ASTM D3034 WITH JOINTS CONFORMING TO ASTM D3212, UNLESS OTHERWISE NOTED ON PLANS.
17. THE OWNER (CONTRACTOR) MUST ALERT THE OHIO UTILITIES PROTECTION SERVICE AT 1-800-362-2764 AT LEAST 48 HOURS BEFORE ANY EXCAVATING HAS BEGUN.
18. ALL ROUGH GRADING (WITHIN 6" OF FINISHED GRADE) SHALL BE COMPLETED WITHIN THE EASEMENTS AND RIGHT-OF-WAY PRIOR TO SANITARY SEWER AND WATER LINE CONSTRUCTION.
19. NO SEWER CONSTRUCTION WILL BE PERMITTED UNTIL SUCH TIME THAT THE PLANS ARE APPROVED BY D.O.E.S. AND THE O.E.P.A., INCLUDING PAYMENT OF REVIEW, AND "PERMIT TO INSTALL" FEES REQUIRED BY THE O.E.P.A.
20. ALL SANITARY SEWERS CONTAINED HEREIN ARE TO BE PUBLICLY OWNED AND MAINTAINED.
21. ALL SEWER RUN DISTANCE GIVEN ARE FROM CENTERLINE TO CENTERLINE OF MANHOLES. ALL PIPE INVERT ELEVATIONS GIVEN AT MANHOLES ARE AT CENTERLINE OF MANHOLE. SEWER GRADES ARE ESTABLISHED FROM CENTERLINE OF MANHOLE AND CARRIED THROUGH MANHOLE INVERT TO ASSURE FLOW THROUGH MANHOLE.
22. ALL UNDERGROUND LINES ENCOUNTERED BY CONSTRUCTION OF SANITARY SYSTEM ARE TO BE COMPLETELY RESTORED AT THE EXPENSE OF THE CONTRACTOR.
23. COST OF WYES AND STUBS TO BE INCLUDED IN PRICE BID PER LINEAR FOOT OF SANITARY SEWER.
24. COST OF ANY SHEETING OR DEWATERING NECESSARY FOR INSTALLATION OF SANITARY SEWER SHALL BE INCLUDED IN PRICE BID PER LINEAR FOOT OF RESPECTIVE ITEMS. ALSO ANY FOUNDATION SLAG REQUIRED.

AKRON PUBLIC UTILITY BUREAU WATER MAIN NOTES

- 1. THE CONTRACTOR SHALL SUPPLY ALL OF THE WATER MAIN MATERIALS, INCLUDING THE DUCTILE IRON PIPE, FITTINGS AND FITTING RESTRAINTS, HYDRANTS AND VALVES. POLYETHYLENE ENCASEMENT, ALL OTHER APPURTENANCES AND ANY ITEMS SPECIALLY ITEMIZED AS REQUIRED FOR THE WATER MAIN INSTALLATION. ALL WATER MAIN MATERIALS SHALL COMPLY WITH THE CITY OF AKRON, AKRON ENGINEERING BUREAU, CONSTRUCTION AND MATERIAL SPECIFICATIONS (LATEST EDITION) ITEM 715, WATER MAIN MATERIALS. INSTALLATION OF ALL WATER MAIN MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 250, WATER MAINS. SUBMITTALS OF MATERIAL SPECIFICATIONS ARE TO BE MADE TO THE UTILITIES ENGINEER PRIOR TO PURCHASING MATERIAL.
2. MUST MAINTAIN A 12 INCH MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL STORM SEWERS AND/OR INLET CONNECTION PIPE WHERE THEY CROSS.
3. MUST MAINTAIN A FOUR FOOT MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL STORM SEWER PIPES AND STORM SEWER MANHOLES.
4. MUST MAINTAIN A TEN FOOT MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL SANITARY SEWER PIPES AND/OR FORCE MAIN PIPES.
5. MUST MAINTAIN AN 18 INCH MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE AND/OR SERVICE LINES TO EDGE OF ALL SANITARY SEWER PIPES WHERE THEY CROSS.
6. THE CONTRACTOR MUST MAINTAIN A 12 INCH MINIMUM VERTICAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL DIRECT BURIAL CONDUITS, CONCRETE ENCASED ELECTRICAL CONDUITS, LIGHT POLE BASES, AND HAND HOLE PULL BOXES.
7. THE CONTRACTOR MUST MAINTAIN A 36 INCH MINIMUM HORIZONTAL CLEARANCE FROM EDGE OF ALL WATER MAIN PIPE TO EDGE OF ALL DIRECT BURIAL CONDUITS, CONCRETE ENCASED ELECTRICAL CONDUITS, LIGHT POLE BASES, AND HAND HOLE PULL BOXES.
8. WHERE WATER MAINS CROSS SEWER TRENCHES, THE TRENCH IS TO BE BACKFILLED WITH APPROVED GRANULAR MATERIAL.
9. APPROVED PIPE FITTINGS, BOLTS, ETC., FOR AKRON SYSTEM WATER MAIN INSTALLATION:
PIPE: CLASS 53 DUCTILE IRON PER AWWA C151 SPECIFICATIONS, WITH CEMENT-LINING PER AWWA C104. LABELLED POLYETHYLENE ENCASEMENT PER AWWA C105 IS REQUIRED.
PIPE JOINTS: PUSH-ON JOINTS (TYTON, BELL-TITE, ETC.), PER AWWA C151 SPECIFICATIONS WITH PLAIN OR RESTRAINING RUBBER GASKETS PER AWWA C111 SPECIFICATIONS.
FITTINGS: CLASS 350 DUCTILE IRON COMPACT FITTINGS PER AWWA C153 OR FULL THICKNESS CASTINGS PER AWWA C110 ARE ACCEPTABLE, WITH MECHANICAL JOINT ENDS AND DUCTILE IRON FOLLOWER GLANDS. ANCHOR PIPE IS REQUIRED ON ALL HYDRANT RUNS BETWEEN THE TEE AND HYDRANT RUN VALVE.
RESTRAINED PIPE SYSTEMS: PUSH-ON JOINT WITH FIELD LOCK (4 THROUGH 12 INCH ONLY) OR FAST GRIP GASKETS (4 THROUGH 12 INCH ONLY), OR MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS AND 6 OUNCE ZINC ANODE CAPS ON EVERY OTHER BOLT THREAD. SUPER LOCK, TR FLEX OR FLEX-RING REQUIRED ON ALL 16 INCH OR LARGER PIPE DIAMETERS.
RESTRAINED FITTING DEVICES: ALL VALVES, BENDS, OFFSETS, HYDRANT INLETS, CAPS, PLUS, AND BRANCHES OF TEES AND WYES MUST BE RESTRAINED USING MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS OR RESTRAINING GASKETS. HARDWOOD BLOCKING IS REQUIRED FOR ALL DIAMETERS 4 THROUGH 8 INCH, CONCRETE BLOCKING AND STRAPPING FOR ALL DIAMETERS 12 INCH AND LARGER. CONCRETE BLOCKING IS REQUIRED ON ALL FIRE LINES AND ON ALL DIAMETERS IN AREAS OVER 100 PSI. RESTRAINED JOINTS FOR DIAMETERS 12 INCH AND UNDER SHALL BE INSTALLED FOR A LENGTH OF 30 FEET ON EACH SIDE OF A VALVE, BEND OR OFFSET USING FIELD-LOCK OR FAST-GRIP RESTRAINING GASKETS OR MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS. RESTRAINED JOINTS FOR DIAMETERS 16 INCH AND LARGER SHALL BE INSTALLED FOR A LENGTH OF 30 FEET ON EACH SIDE OF A VALVE, BEND OR OFFSET USING MECHANICAL JOINT WITH RESTRAINED FOLLOWER GLANDS.
MECHANICAL JOINT T-HEAD BOLTS: ALL MECHANICAL JOINTS SHALL BE MADE WITH COR-TEN OR CONSTRUCTION-GRADE ALLOYED DUCTILE IRON BOLTS. T-HEAD BOLTS SHALL BE 1/2 INCH LONGER THAN STANDARD LENGTH AND MUST INCLUDE A 6 OZ. ZINC ANODE CAP ON EVERY OTHER BOLT THREAD.
HYDRANTS: AKRON-STYLE MUELLER "CENTURIAN" MODEL A423, KENNEDY "GUARDIAN" MODEL K-81A, AMERICAN FLOW CONTROL MODEL B628 WITH 6 INCH INLET, AMERICAN FLOW CONTROL MODEL B648 WITH 8 INCH INLET. THREADS SHALL BE AKRON STYLE AS SHOWN ON AKRON WATER WORKS STANDARD CONSTRUCTION DRAWINGS F-3258 AND F-3440.
GATE VALVES: RESILIENT-SEAT WEDGE (RSW) VALVES WITH RESTRAINED MECHANICAL JOINTS. VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN TO THE RIGHT (CLOCKWISE).
BUTTERFLY VALVES, 18 INCH AND UP: RESTRAINED MECHANICAL JOINT OR SHOULDERED (NOT GROOVED) NOTALIC ENDS WITH STYLE 444 COUPLINGS AND STAINLESS STEEL 316 BOLTS. RUBBER SEALS IN THE VALVE MUST BE REPLACEABLE. FLANGED END OR WAFER-STYLE VALVES ARE NOT ACCEPTABLE.
VALVE BOXES: BIBBY, TYLER, BINGHAM AND TAYLOR OR EAST JORDAN BRANDS ARE ACCEPTABLE FOR COMPATIBILITY.
CURB BOXES: RISER PIPE MUST BE OF YOLOX CORROSION RESISTANT MATERIAL. PLUG MUST BE CAST IRON AND THREAD INTO A BRASS RING.
10. COMPACTED PREMIUM BACKFILL IS REQUIRED FOR UNDERGROUND CONSTRUCTION UNDER OR WITHIN THE 5 FEET OF ANY PROPOSED OR EXISTING SIDEWALK OR PAVEMENT. THE BACKFILLING SHALL CONFORM TO SECTION 551.09 OF THE CITY OF AKRON CONSTRUCTION AND MATERIAL SPECIFICATIONS, LATEST EDITION.
11. ANY EXISTING WATER MAINS, HYDRANTS, VALVES, VALVE BOXES, METER VAULTS, SERVICE LINES, OR CURB BOXES THAT ARE DAMAGED OR MUST BE ADJUSTED AND/OR MOVED MUST BE REPAIRED, ADJUSTED, MOVED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTACT KEVIN NEITZ, WATER DISTRIBUTION SUPERVISOR, AT (330) 375-2420 TO SCHEDULE THIS WORK.
12. NO TAPS FOR WATER SERVICES SHALL BE MADE UNTIL AFTER THE MAINLINE HAS BEEN TESTED AND STERILIZED. ALL TAPS 2 INCH AND SMALLER SHALL BE MADE BY THE CITY OF AKRON.
13. ALL WATER MAIN CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF AKRON. NOTIFY THE CITY OF AKRON (DOUG ZWAHLEN OR KEVIN NEITZ) AT (330) 375-2420 AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND FOR ALL PRECONSTRUCTION MEETINGS.
14. PRIOR TO ACCEPTANCE, THE WATER LINE SHALL BE PRESSURE TESTED, AS SPECIFIED IN AWWA C600, AND DISINFECTED AS SPECIFIED IN AWWA C651 LATEST REVISIONS, BY THE CONTRACTOR.
15. USE EXTREME CAUTION WHEN EXCAVATING IN THE AREA OF EXISTING WATER MAIN PIPES, VALVES, HYDRANTS AND THRUST BLOCKS.
16. THE CONTRACTOR SHALL SUPPLY A TEMPORARY SAFE WATER SERVICE TO ALL HOMES THAT WILL HAVE THEIR WATER SERVICE INTERRUPTED BY THIS CONSTRUCTION.
17. THE PROPOSED FACILITIES MUST MAINTAIN A MINIMUM OF 35 PSI PRESSURE DELIVERED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.
18. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
19. ANY CONNECTION TO EXISTING DUCTILE IRON WATER MAIN SHALL BE MADE WITH A DUCTILE IRON SOLID SLEEVE WITH RESTRAINING GLANDS AND CONNECTION TO EXISTING CAST IRON WATER MAIN MAY BE MADE WITH A CAST COUPLING OR DUCTILE IRON SOLID SLEEVE WITH RESTRAINING GLAND.
OPTIONAL
1. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL EXCAVATION REQUIRED TO ASSIST PUBLIC UTILITIES IN THE INSTALLATION OF NEW AND RENEWED COPPER SERVICES ON EXISTING WATER MAINS. THE COST OF THIS WORK SHALL BE INCLUDED IN ITEM 252, TRENCHES FOR WATER SERVICE IN EARTH.

UTILITY CONTACTS

FIRE DEPARTMENT
COPELY FIRE DEPARTMENT
1540 S. CLEVELAND-MASSILLON RD.
COPELY, OHIO 44321
ED SIMPSON, CHIEF FIRE INSPECTOR: 330-666-6644
GAS
DOMINION EAST OHIO GAS CO.
2100 EASTWOOD AVE.
AKRON, OHIO 44305
MIKE WINTROW: 330-798-7148
DOMINION EAST OHIO GAS TRANSMISSION
7015 FREEDOM AVE.
NORTH CANTON, OHIO 44720
DAVID CROFT: 330-266-2047
ELECTRIC
OHIO Edison CO.
111 CASCADE PLAZA
AKRON, OHIO 44308
CONNIE PACANOUSKY: 330-384-4601
CABLE
TIME WARNER
8385 BAVARIA PARKWAY
MACEDONIA, OH 44056
DENNIS THOMPSON: 330-963-3620
TELEPHONE
GENERAL TELEPHONE OF OHIO
6343 NORWALK RD.
MEDINA, OH 44256
DAVE AARON: 330-722-9586
ENGINEERING
SUMMIT COUNTY ENGINEER
538 E. SOUTH ST.
AKRON, OHIO 44311
ALLOTMENT ENGINEER
ANDY DUNGHUCK: 330-643-2850
DRAINAGE ENGINEER
TIM BOLEY: 330-643-2850
COPELY TOWNSHIP
1540 S. CLEVELAND-MASSILLON RD.
COPELY, OHIO 44321
MATTHEW SPRINGER: 330-666-0108
O.U.P.S.
OHIO UTILITIES PROTECTION SERVICE
1-800-362-2764
EROSION CONTROL
SUMMIT SOIL AND WATER CONSERVATION DISTRICT
2795 FRONT ST.
SUITE D
CUYAHOGA FALLS, OHIO 44221
CINDY FINK: 330-929-2871

REVISIONS

Table with 2 columns: No., Description. Currently empty.

GBC DESIGN, INC.
3875 West Market St. Akron, OH 44388-9886
Phone 380-658-9782
Fax 380-658-9782

PULTE HOMES OF OHIO, LLC
387 MEDINA RD., SUITE 1700
MEDINA, OH 44256
REP.: STAN KATANIC

BENTLEY RESERVE
465 S. HAMELTOWN RD.
COPELY TOWNSHIP, OHIO
GENERAL NOTES
DRAWN BY: T.G.W.
DATE: JAN. 4, 2011
PROJECT NO. 36048D
DRAWING NO. SD-2